

Abstract

The invention relates a diagnostic circuit for a treble loudspeaker of a loudspeaker combination of a low-frequency output stage, and a method for diagnosing the functionality of the treble loudspeaker.

In order to determine the functionality of the treble loudspeaker with relatively little complexity and high reliability, a diagnostic circuit is proposed that comprises:

an HF signal-generating device (2) for outputting an HF voltage signal (s_2);
at least one terminal (A1, A2) for a loudspeaker combination (4);
a measuring resistor (R2) that, upon connection of the loudspeaker combination (4) to the terminal (A1), forms therewith a voltage divider circuit (R2, 4);
a measurement device (10, 11, 12) for measuring a complex measured voltage (U_{A1}) dropping in the voltage divider circuit (R2, 4) and for ascertaining a condition of the treble loudspeaker (LS2) of the loudspeaker combination (4).

(Figure 1)